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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,410	12/03/2003	Norbert Weghaus	WEGHAUS1	4749

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EXAMINER

ADDISU, SARA

ART UNIT	PAPER NUMBER
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3722

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

This Office Action is in response to the amendment filed 6/20/06. Currently, claims 1-6 are pending in this application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1, line 16-17 recites "only one each of continuously extending first and second sides". The Specification does not disclose what the Applicant defines as being "continuous". The word "continuous" is not limited to "extending linearly" what is believed the Applicant means. However, "continuous" could also means "unbroken: having no gaps, holes, or breaks (based on MSN Encarta online dictionary), therefore Psenka's partial side (74) and the unnumbered second side have no breaks thus are "continuously extending".

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Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1, page 3, lines 14- claims first side of the teeth having guide edges without cutting ability and the second sides being relieved surfaces that do not touch the profiled flank the second side face. Even with the explanation given in the remarks files 6/20/06, it is not clear from the Specification and drawings how a broach cutting teeth that cuts only on its bottom side and having non-cutting sides could while having a shape as shown in Figure 3, could form smooth profiles 15 and 16 (i.e. shouldn't the profile of 15 and 16 have a staggered shape since only the bottom side of each teeth peels of chips at the bottom of the flank).

Drawings

The drawings are objected to because it is not clear from the Specification and drawings how a broach cutting teeth that cuts only on its bottom side and having non-cutting sides could while having a shape as shown in Figure 3, could form smooth profiles 15 and 16 (i.e. shouldn't the profile of 15 and 16 have a staggered shape since only the bottom side of each teeth peels of chips at the bottom of the flank).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

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prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, as best understood, are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Psenka (U.S. Patent No. 2,683,919), in view of Applicant's Admitted Prior Art (AAPA).

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Psenka teaches an internal broach (10) for internally broaching tooth space (profiles) (30 or 40), defined by a bottom and profile flanks. Psenka also teaches a broach having a shank (with central longitudinal axis) leading in a direction of broaching and a series of circular [annular] blades (toothed sections, therefore having a distance (i.e. pitch between the teeth) with several rows of broach cutting teeth (bottom cutting blades as well as first and second sides allocated to the flanks) disposed successively counter to the direction of broaching and parallel to the longitudinal axis (see figure 1 & 3), to form the desired depth and shape ('919, Col. 3, lines 1-12). Psenka also teaches cutting teeth (E-G) having a bottom-cutting blade ('919, Col. 4, lines 10-12), side (72) with guiding function (also admitted by Applicant's remark, page 10, lines 4-5) that form profile flanks (e.g. 52) and a non-cutting relieved edge (74 at the vicinity of pitch a) on the opposite side of side (72) and form flanks in the vicinity of the pitch ('919, figure 5 and Col. 4, lines 16-26). The bottom cutting blade transitions into a relieved side surface (74), therefore the relieved side surface does not rest on the profile flank until the engagement with the bottom-cutting blade. Note that MSN Encarta online dictionary defines "continuous" as "unbroken: having no gaps, holes, or breaks (based on MSN Encarta online dictionary), therefore Psenka's has a "continuously extending" second side since the partial side (74) and the unnumbered second side have no breaks. The relieved surface (74) of the second side never touches the profile flank. Psenka also teaches the bottom cutting blades being designed for cutting over a full profile width ('919, Col. 4, lines 52-55). Additionally, the guide edges are unrelieved surfaces (therefore having no flank pitch) (Col. 6, lines 4-6). Regarding claim 4, Psenka teaches

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in figure 1, broach cutting teeth disposed in rows (parallel to the central longitudinal axis) as well as side by side relative the direction of broaching such that they form helically extending chip spaces with respect to the central longitudinal axis. Regarding claims 3, 5 and 6, Psenka teaches a broach designed to cut helical teeth, tooth spaces, splines or splineways, when drawn through a hole in a work piece ('919, Col. 1, lines 1-4).

However, Psenka fails to teach the bottom surfaces of the bottom-cutting blade being a relieved. Applicant's Admitted Prior Art (AAPA) teaches that it is customary for the bottom cutting blades to have a relief surface (Specification Page 10, lines 8-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Psenka invention to have a relieved bottom-cutting blade, as taught by AAPA, because AAPA teaches that it is customary for the bottom cutting blades to have a relief surface.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Addisu at (571) 272-6082. The examiner can normally be reached on 8:30 am - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sara Addisu
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SA
9/13/06


MONICA CARTER
SUPERVISORY PATENT EXAMINER